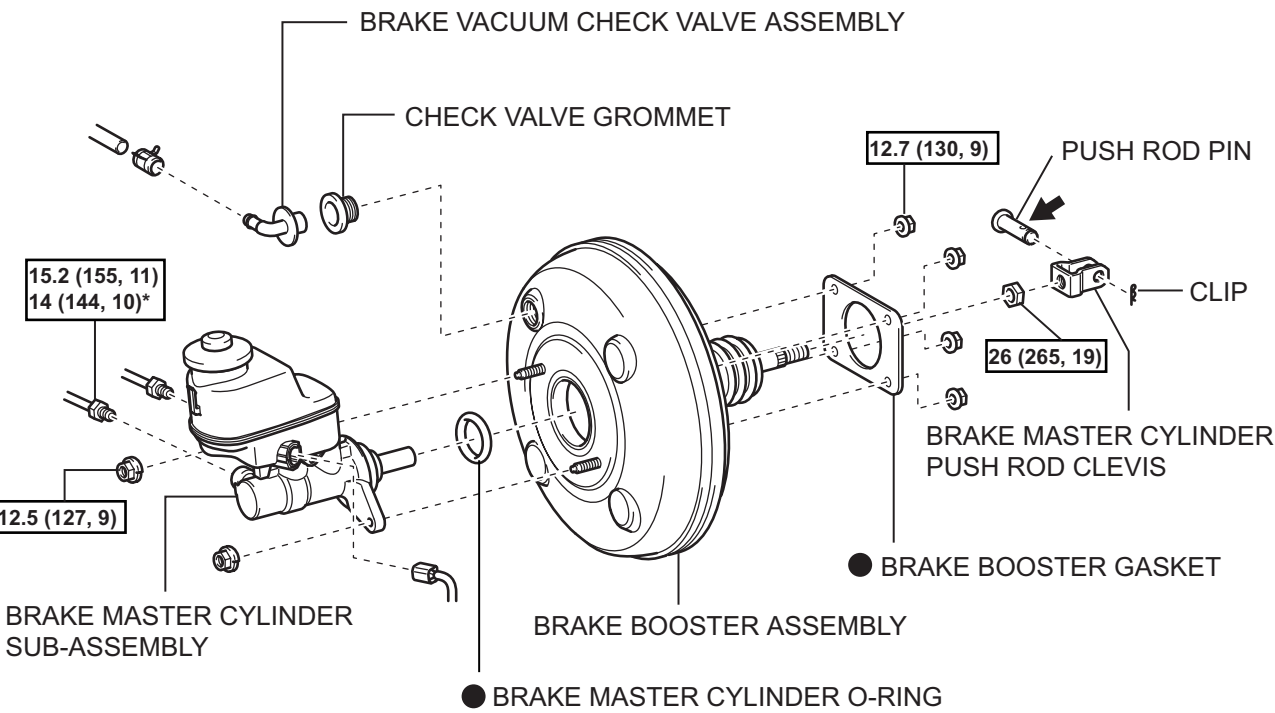


BRAKE BOOSTER

COMPONENTS

w/ $\phi 275$ Disc Brake



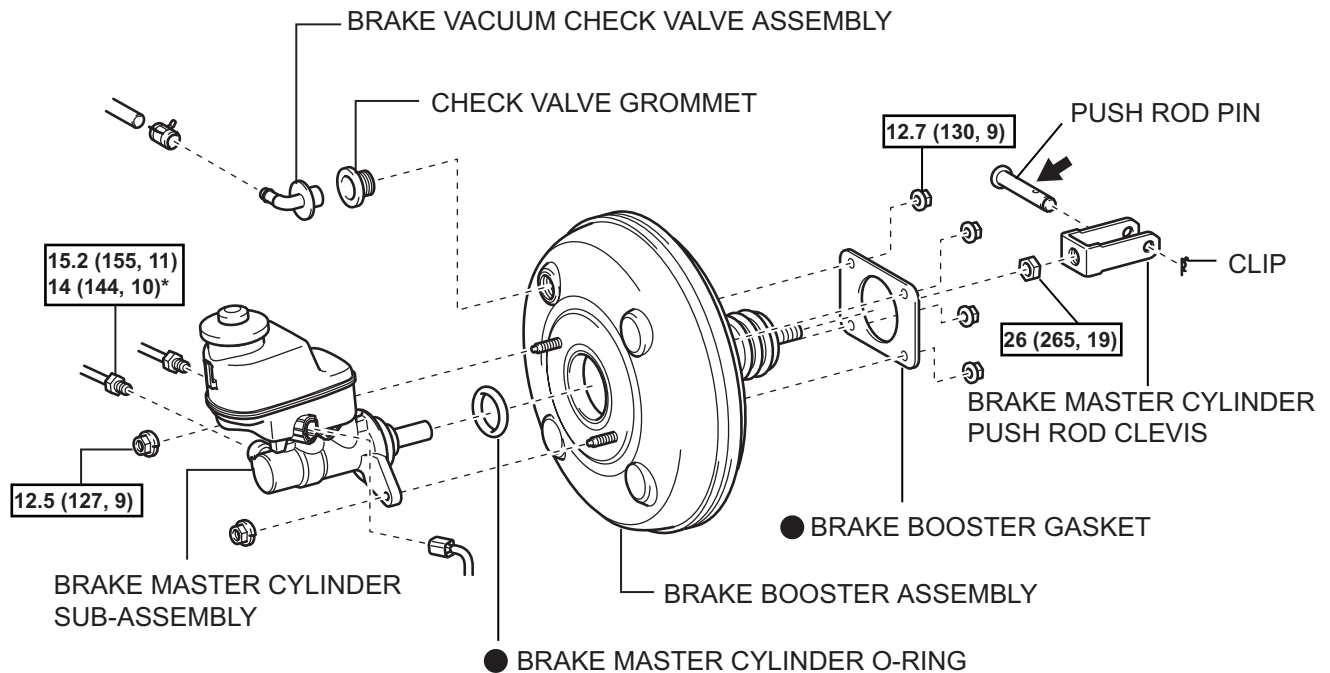
BR

N*m (kgf*cm, ft.*lbf) : Specified torque

● Non-reusable part

* For use with SST

← Lithium soap base glycol grease

w/ $\phi 296$ Disc Brake

N*m (kgf*cm, ft.*lbf) : Specified torque

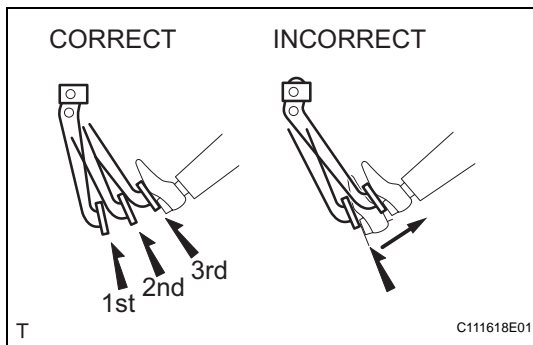
● Non-reusable part

* For use with SST

← Lithium soap base glycol grease

BR

C130673E02



ON-VEHICLE INSPECTION

1. CHECK BRAKE BOOSTER ASSEMBLY

(a) Airtightness check.

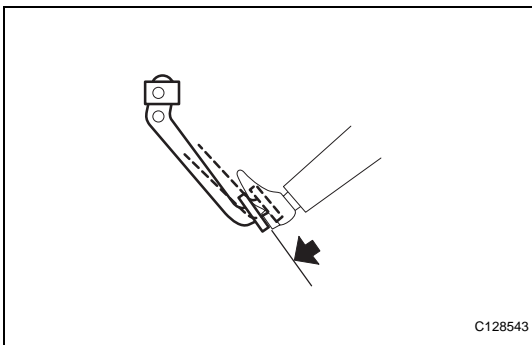
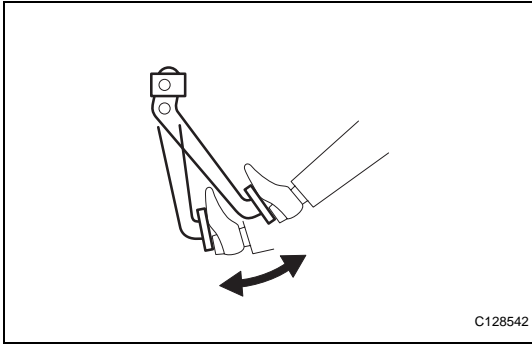
- (1) Start the engine and stop it after 1 or 2 minutes. Slowly depress the brake pedal several times.
- (2) Make sure the booster is airtight. Check that the distance the pedal can be depressed decreases gradually in correlation with each subsequent press of the pedal.
If the pedal is not as specified, check the check valve.
If the check valve is normal, replace the booster.
- (3) Start the engine. Depress and hold down the pedal, and stop the engine.
- (4) Make sure the booster is airtight. Hold the pedal for 30 seconds and check that there is no change in the pedal reserve distance.
If the pedal is not as specified, check the check valve.

If the check valve is normal, replace the booster.

(b) Operation check.

(1) Stop the engine.

(2) Depress the pedal several times and check that there is no change in the pedal reserve distance.

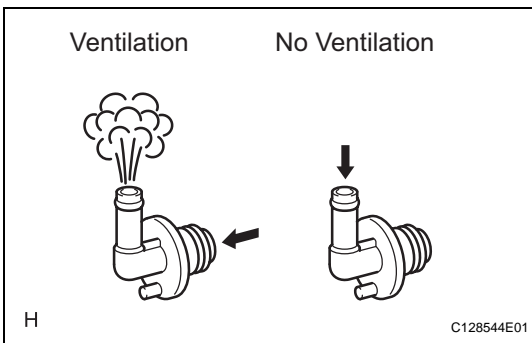


(3) Depress and hold down the pedal, and start the engine. Check that the pedal can only be depressed slightly.

If the pedal is not as specified, check the check valve.

If the check valve is normal, replace the booster.

BR



2. CHECK BRAKE VACUUM CHECK VALVE ASSEMBLY

(a) Check the check valve.

(1) Slide the clip and disconnect the vacuum hose.

(2) Remove the check valve from the booster.

(3) Check that there is ventilation from the booster to the engine, and no ventilation from the engine to the booster.

If the results are not as specified, replace the check valve assembly.

REMOVAL

(2005/11-2006/01)

1. REMOVE AIR CLEANER CASE SUB-ASSEMBLY

- (a) Remove the air cleaner case (see page [EM-98](#)).

HINT:

Refer to the procedures from the removal of the purge VSV up until the removal of the air cleaner case.

2. DRAIN BRAKE FLUID

NOTICE:

Wash off brake fluid immediately if it comes in contact with any painted surface.

3. DISCONNECT BRAKE LINES (See page [BC-181](#))

4. REMOVE ABS AND TRACTION ACTUATOR ASSEMBLY WITH BRACKET (See page [BC-182](#))

5. REMOVE BRAKE MASTER CYLINDER SUB-ASSEMBLY (See page [BR-21](#))

6. DISCONNECT VACUUM HOSE

7. REMOVE PUSH ROD PIN

- (a) Remove the clip from the push rod pin.
(b) Remove the push rod pin from the push rod clevis.

8. REMOVE BRAKE MASTER CYLINDER PUSH ROD CLEVIS

- (a) Loosen the push rod clevis lock nut.
(b) Remove the push rod clevis.

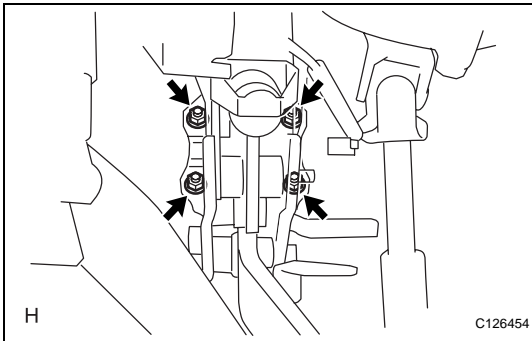
9. REMOVE BRAKE BOOSTER ASSEMBLY

- (a) Remove the 4 nuts.
(b) Pull out the booster with gasket.

10. REMOVE BRAKE BOOSTER GASKET

11. REMOVE BRAKE VACUUM CHECK VALVE ASSEMBLY

12. REMOVE CHECK VALVE GROMMET



REMOVAL

(2006/01-)

1. REMOVE AIR CLEANER CASE SUB-ASSEMBLY (for 2AZ-FE)

- (a) Remove the air cleaner case (see page [EM-98](#)).

HINT:

Refer to the procedures from the removal of the purge VSV up until the removal of the air cleaner case.

2. REMOVE AIR CLEANER CASE (for 2GR-FE)

- (a) Remove the air cleaner case (see page [EM-21](#)).

HINT:

Refer to the procedures from the removal of the air cleaner cap sub-assembly up until the removal of the air cleaner case.

3. DRAIN BRAKE FLUID

NOTICE:

Wash off brake fluid immediately if it comes in contact with any painted surface.

4. DISCONNECT BRAKE LINES (See page [BC-183](#))

5. REMOVE ABS AND TRACTION ACTUATOR ASSEMBLY WITH BRACKET (See page [BC-184](#))

6. REMOVE BRAKE MASTER CYLINDER SUB-ASSEMBLY (See page [BR-22](#))

7. DISCONNECT VACUUM HOSE

8. REMOVE PUSH ROD PIN

- (a) Remove the clip from the push rod pin.
(b) Remove the push rod pin from the push rod clevis.

9. REMOVE BRAKE MASTER CYLINDER PUSH ROD CLEVIS

- (a) Loosen the push rod clevis lock nut.
(b) Remove the push rod clevis.

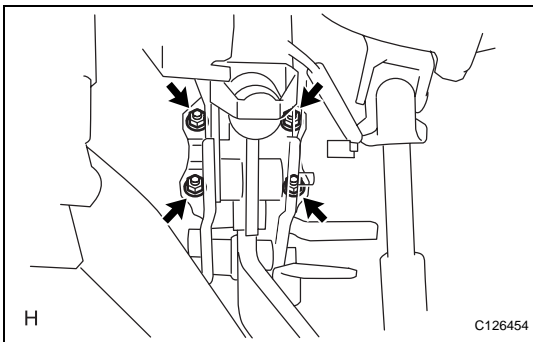
10. REMOVE BRAKE BOOSTER ASSEMBLY

- (a) Remove the 4 nuts.
(b) Pull out the booster with gasket.

11. REMOVE BRAKE BOOSTER GASKET

12. REMOVE BRAKE VACUUM CHECK VALVE ASSEMBLY

13. REMOVE CHECK VALVE GROMMET

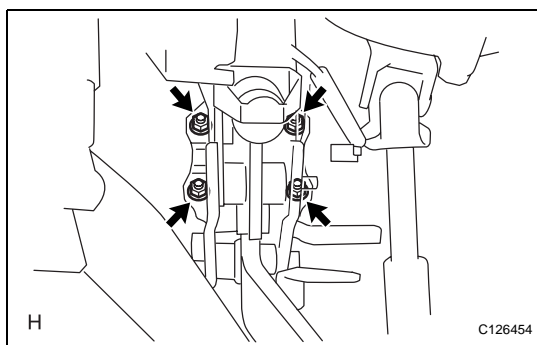


INSTALLATION

(2005/11-2006/01)

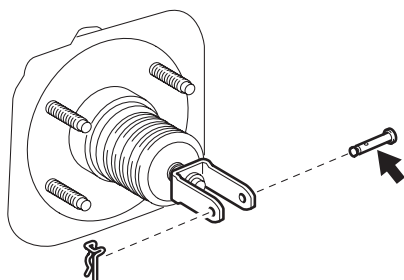
1. **INSTALL CHECK VALVE GROMMET**
 - (a) Install the grommet to the booster.
2. **INSTALL BRAKE VACUUM CHECK VALVE ASSEMBLY**
 - (a) Install the check valve to the grommet.
3. **INSTALL BRAKE BOOSTER GASKET**
 - (a) Install a new gasket to the booster.
4. **INSTALL BRAKE MASTER CYLINDER PUSH ROD CLEVIS**
 - (a) Install the push rod clevis to the booster.
 - (b) Temporarily tighten the push rod clevis lock nut.

HINT:
The push rod clevis lock nut will be tightened to a torque specification in the "CHECK AND ADJUST BRAKE PEDAL HEIGHT" procedures.
5. **INSTALL BRAKE BOOSTER ASSEMBLY**
 - (a) Install the booster with the 4 nuts.
Torque: 12.7 N*m (130 kgf*cm, 9 ft.*lbf)
6. **INSTALL PUSH ROD PIN**

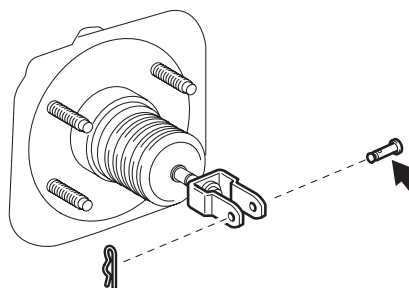


BR

w/ ϕ 296 Disc Brake



w/ ϕ 275 Disc Brake



← Lithium Soap Base Glycol Grease

C130666E04

- (a) Apply lithium soap base glycol grease to the push rod pin.
- (b) Install the push rod pin to the push rod clevis.

NOTICE:

The push rod pin must be installed as shown in the illustration.

- (c) Install the clip to the push rod pin.

NOTICE:

The clip must be installed as shown in the illustration.

7. **CHECK AND ADJUST BRAKE BOOSTER PUSH ROD**
(See page [BR-24](#))
8. **CONNECT VACUUM HOSE**
 - (a) Connect the vacuum hose to the check valve.
9. **INSTALL BRAKE MASTER CYLINDER SUB-ASSEMBLY** (See page [BR-25](#))
10. **INSTALL ABS AND TRACTION ACTUATOR ASSEMBLY WITH BRACKET** (See page [BC-186](#))
11. **CONNECT BRAKE LINES** (See page [BC-187](#))
12. **FILL RESERVOIR WITH BRAKE FLUID** (See page [BR-6](#))
13. **BLEED AIR FROM BRAKE MASTER CYLINDER** (See page [BR-7](#))
14. **BLEED AIR FROM BRAKE LINE** (See page [BR-7](#))
15. **BLEED AIR FROM ABS AND TRACTION ACTUATOR ASSEMBLY** (See page [BR-8](#))
16. **CHECK AND ADJUST BRAKE PEDAL HEIGHT** (See page [BR-13](#))
17. **CHECK BRAKE PEDAL FREE PLAY** (See page [BR-14](#))
18. **CHECK BRAKE PEDAL RESERVE DISTANCE** (See page [BR-14](#))
19. **CHECK BRAKE FLUID LEVEL IN RESERVOIR** (See page [BR-6](#))
20. **CHECK FOR BRAKE FLUID LEAKAGE**
21. **INSTALL AIR CLEANER CASE SUB-ASSEMBLY**
 - (a) Install the air cleaner case (see page [EM-105](#)).
HINT:
Refer to the procedures from the installation of the air cleaner case up until the installation of the purge VSV.

INSTALLATION

(2006/01-)

1. INSTALL CHECK VALVE GROMMET

- (a) Install the grommet to the booster.

2. INSTALL BRAKE VACUUM CHECK VALVE ASSEMBLY

- (a) Install the check valve to the grommet.

3. INSTALL BRAKE BOOSTER GASKET

- (a) Install a new gasket to the booster.

4. INSTALL BRAKE MASTER CYLINDER PUSH ROD CLEVIS

- (a) Install the push rod clevis to the booster.
(b) Temporarily tighten the push rod clevis lock nut.

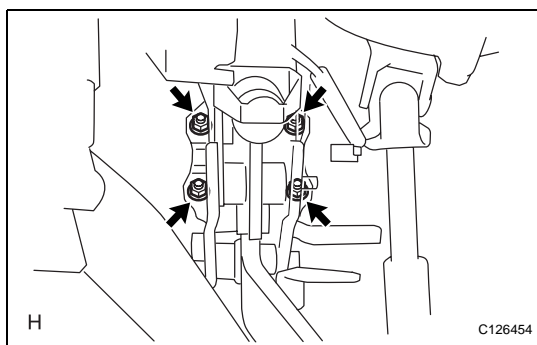
HINT:

The push rod clevis lock nut will be tightened to a torque specification in the "CHECK AND ADJUST BRAKE PEDAL HEIGHT" procedures.

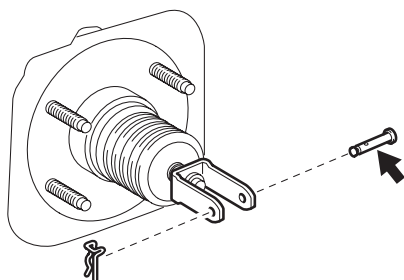
5. INSTALL BRAKE BOOSTER ASSEMBLY

- (a) Install the booster with the 4 nuts.
Torque: 12.7 N*m (130 kgf*cm, 9 ft.*lbf)

6. INSTALL PUSH ROD PIN

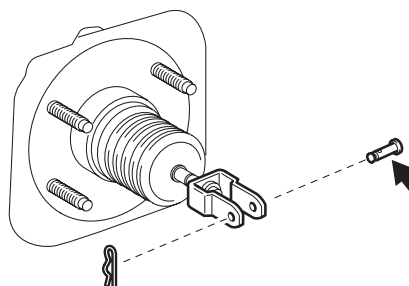
**BR**

w/ ϕ 296 Disc Brake



← Lithium Soap Base Glycol Grease

w/ ϕ 275 Disc Brake



C130666E04

- (a) Apply lithium soap base glycol grease to the push rod pin.
(b) Install the push rod pin to the push rod clevis.

NOTICE:

The push rod pin must be installed as shown in the illustration.

- (c) Install the clip to the push rod pin.

NOTICE:

The clip must be installed as shown in the illustration.

7. **CHECK AND ADJUST BRAKE BOOSTER PUSH ROD**
(See page [BR-24](#))
8. **CONNECT VACUUM HOSE**
 - (a) Connect the vacuum hose to the check valve.
9. **INSTALL BRAKE MASTER CYLINDER SUB-ASSEMBLY** (See page [BR-26](#))
10. **INSTALL ABS AND TRACTION ACTUATOR ASSEMBLY WITH BRACKET** (See page [BC-187](#))
11. **CONNECT BRAKE LINES** (See page [BC-188](#))
12. **FILL RESERVOIR WITH BRAKE FLUID** (See page [BR-6](#))
13. **BLEED AIR FROM BRAKE MASTER CYLINDER** (See page [BR-7](#))
14. **BLEED AIR FROM BRAKE LINE** (See page [BR-7](#))
15. **BLEED AIR FROM ABS AND TRACTION ACTUATOR ASSEMBLY** (See page [BR-8](#))
16. **CHECK AND ADJUST BRAKE PEDAL HEIGHT** (See page [BR-15](#))
17. **CHECK BRAKE PEDAL FREE PLAY** (See page [BR-15](#))
18. **CHECK BRAKE PEDAL RESERVE DISTANCE** (See page [BR-16](#))
19. **CHECK BRAKE FLUID LEVEL IN RESERVOIR** (See page [BR-6](#))
20. **CHECK FOR BRAKE FLUID LEAKAGE**
21. **INSTALL AIR CLEANER CASE SUB-ASSEMBLY (for 2AZ-FE)**
 - (a) Install the air cleaner case (see page [EM-105](#)).
HINT:
Refer to the procedures from the installation of the air cleaner case up until the installation of the purge VSV.
22. **INSTALL AIR CLEANER CASE (for 2GR-FE)**
 - (a) Install the air cleaner case (see page [EM-31](#)).
HINT:
Refer to the procedures from the installation of the air cleaner case up until the installation of the air cleaner cap sub-assembly.